

## **ABSTRACT**

An optical router capable of efficiently allocating optimum optical paths to optical signals at optimum timings is provided in accordance with the present invention.

The optical router comprises:

optical delay means for delaying a plurality of the optical signals containing routing information attached to the header parts thereof by an optical signal delay time;

an optical switch provided with a plurality of input ports whereto a plurality of optical outputs of the optical delay means are input and with a plurality of output ports wherefrom the optical signals are output;

an optical-electrical converter for converting a plurality of the optical signals to electrical signals;

memory wherein path control information and delay time information are stored; and

a controller for generating an electrical routing control signal whereby to change the optical paths of the optical signals by finding the path control information according to the routing information extracted from the output of the optical-electrical converter and for delaying the electrical routing control signal by an electrical signal delay time determined according to the delay time information before outputting the electrical routing control signal to the optical switch.